

## REMARKS

Applicant appreciates the Examiner's review and comments. Applicant has endeavored to amend the application in response to the Examiner's comments and respectfully requests reconsideration in view of the amendments above and the remarks below.

### Rejections under 35 U.S.C. § 103

The Examiner maintains the rejections under 35 U.S.C. § 103 for claims 1-15 as being obvious from Vahalia, et al., U.S. Patent No. 6,298,386, in view of IBM Technical Disclosure Bulletin Vol. 40, No. 5, May 1997. Applicant respectfully traverses this rejection.

The Examiner notes that the applicant defines a ferris-wheel queue, in part, as allowing multiple processes to have access to the queue in an interleaving fashion. The Examiner cites Vahalia as having a collector queue that mixes messages from a pipe for a connection oriented process and interleaves the messages with other connection oriented processes. Vahalia, col. 18, ll.46-49. This is certainly true of Vahalia's input queuing; however, this is not true of Vahalia's output queuing or *dequeuing*. "[T]he collector queue is serviced on a first-in, first-out basis." Vahalia, col. 18, ll.51-54. A ferris-wheel queue is not serviced on a first-in, first-out (FIFO) basis. A ferris-wheel queue, as designed and operated, does not perform in either a FIFO, or for that matter, in a FILO manner. In the present invention, a *deque* set of functions controls removing data from the ferris-wheel queue. As part of the *deque* function, a read function performs a *round robin search* in the first dimension of the buffer and maintains the associated control variables for each ferris-wheel seat's message structure. Specification, p.9, ll.3-8.

Generally, the *deque* steps of *dequing* data from the Ferris-Wheel buffer include, first, conducting a simple round robin search of the Ferris-Wheel buffers checking

the control data of each seat in sequence. If the seat is marked ready to transmit then the process may continue, otherwise it must be blocked, waiting for the next seat to become ready.

Specification, p.9, ll.19-23.

There is no need for Vahalia to perform a *dequeue* round robin search since it operates a first-out buffer. Moreover, Vahalia cannot support a round robin search as taught and disclosed, since such a round robin search would require a number of message structures that are not available to Vahalia. These message structures, absent in Vahalia, are evident in the present invention.

The preferred embodiment of the Ferris-Wheel buffer is characterized as a circular array of message structures. The message structures are a set of control variables, such as, "Message Ready", "Message Size", "Last Handle", "Read Index"; and "Message Buffer".

Specification, p.13, ll.8-11.

The main controlling function in the dequeuing process of the present invention is a read function. It is the read function that checks the ferris-wheel in a round robin search method for a seat which is marked as ready to transmit. Specification, p.13, ll.22-25. Vahalia simply outputs the first queue that came in (FIFO), in a sequentially, orderly fashion.

Applicant has amended the claims to more clearly define the round robin search performed by the present invention to locate a ferris-wheel seat with a message structure marking the seat as ready for transmitting, and then transmitting the associated data. This transmitted data is not the first data in, but may be in any order independent of the order in which it was received. Vahalia does not teach, disclose, or suggest this type of transmission order, and is incapable of supporting this transmission order without significant modification to its operating software.

It is respectfully submitted that the application has now been brought into a condition where allowance of the entire case is proper. Reconsideration and issuance of a notice of allowance are respectfully solicited.

Respectfully submitted,



Robert Curcio  
Reg. No. 44,638

**DeLIO & PETERSON, LLC**  
121 Whitney Avenue  
New Haven, CT 06510-1241  
(203) 787-0595

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Name: Barbara Browne Date: July 1, 2004

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